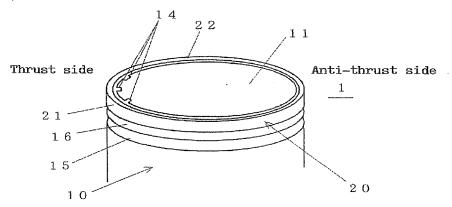
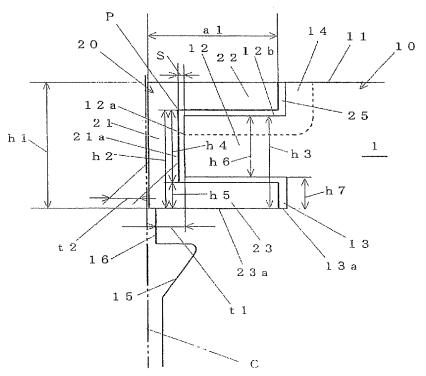
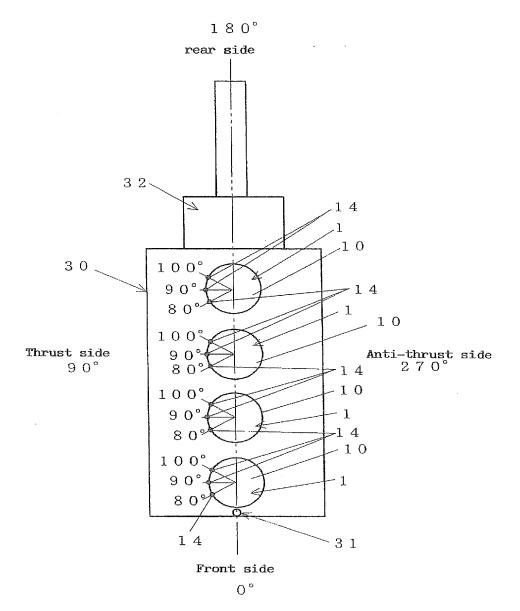
(Fig. 1)



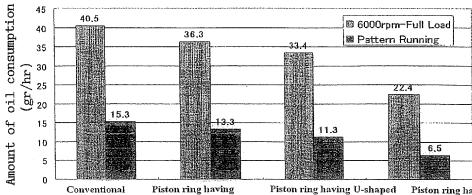
(Fig. 2)



(Fig. 3)







U-shaped cross section according to present

invention

single-ring set

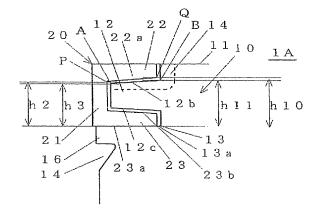
(Fig. 5)

Piston ring having U-shaped cross section according to present invention

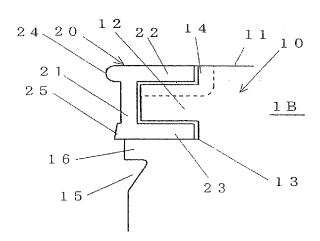
+ grooves on the thrust side

Piston ring having U-shaped cross section according to present invention

+ grooves on the thrust side + V-shaped annular groove in the 2nd land portion



(Fig. 6)



(Fig. 7)

